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AMENDMENTS TO THE CLAIMS:

This listing of claims replaces all prior versions and listings of claims in the application:

LISTING OF CLAIMS:

1. (Currently Amended) A controller comprising:

~~with~~ a control circuit ~~that contains~~ comprising:

a forward path that includes an input and an output;

a feedback path coupled back to the output and to the feedback input; and of the control circuit, with

a sensor, which is in the forward path between the input and the output, the sensor generating (S) that is arranged in the control circuit and emits a sensor signal; at its output, which is converted into a feedback signal and routed back to the feedback input of the control circuit, characterized by

[[-]] an error signal generator (F) that generates an error signal and that provides the error signal to feeds it into the control circuit, wherein the forward path generates an output signal based on the sensor signal and the error signal, the output signal being sent along the feedback path to the input of the forward path; and [[.]]

[[-]] a detector (D), which monitors that obtains an intermediate signal from the forward path between the input and the output, the detector generating a first control signal

and a second control signal based on the intermediate signal, the detector controlling the error signal generator using the first control signal; measuring signal of the control circuit,

[[-]] wherein the forward path comprises a control device (KS) in the control circuit, which that limits sets the output signal (I2) of the control circuit to a predetermined value, the detector controlling the control device using the second control signal as a function of the output signal of the detector.

2. (Currently Amended) The controller ~~according to~~ of claim 1, ~~characterized in that wherein~~ the detector (D) ~~contains~~ comprises:

a storage device that stores a measurement signal; (SP) and

a comparator (EC), ~~which that~~ compares the measuring intermediate signal to the measurement signal and that outputs a comparator signal of the control circuit with a signal stored in the storage device (SP).

3. (Currently Amended) The controller ~~according to~~ of claim 2, wherein the detector further comprises:

decision logic that receives the comparator signal and that controls the control device in accordance with the comparator signal characterized in that the comparator (EC) is connected with a decider logic (E), which actuates the control device (KS).

4. (Currently Amended) The controller ~~according to~~ of claim 1 to 3, wherein
~~characterized in that~~ the control device (KS) ~~contains~~ comprises a clamp circuit ~~that sets~~
~~the output signal (I2) of the control circuit to the predetermined value.~~

5. (Currently Amended) The controller ~~according to~~ of claim 2 3, characterized in
~~that wherein~~ the comparator comprises at least one of ~~detector (D)~~ contains a signal level
comparator (LC) ~~and/or~~ and a signal sign comparator (SC), ~~whose input is connected with~~
~~the control circuit, and whose output is connected with the decider logic (E).~~

6. (Currently Amended) The controller ~~according to one of claims 3 to 5,~~
~~characterized in that the error signal generator (F) is connected with~~ of claim 1, further
comprising:

a time signal generator that generates a time signal output, wherein the error signal
generator generates the error signal based on the time signal output (TC) and/or the
detector (D), and generates the error signal as a function of its output signal.

7. (Currently Amended) The controller ~~according to one of claims 1 to 5,~~
~~characterized in that~~ of claim 1, wherein the sensor comprises a magnetoresistive sensor
(S) ~~is provided for acquiring a magnetic field.~~

8. A method ~~for~~ of operating a controller comprised of:

a forward path that includes an input and an output;

a feedback path coupled to the output and to the input; and
a sensor, which is in the forward path between the input and the
output, the sensor generating a sensor signal, the forward path generating an
output signal based on the sensor signal, the output signal being applied to
the input of the forward path via the feedback path;

wherein the method comprises:

~~according to one of claims 1 to 7, in which a sensor (S) arranged in a control circuit~~
~~emits a sensor signal, which is converted into a feedback signal and routed back to a~~
~~feedback input of the control circuit, characterized by the following steps—~~
~~an error signal of an error signal generator (F) is injected into the control circuit,~~

~~[[-]] a detector (D) monitors a measuring~~ obtaining an intermediate signal of the
~~control circuit, from the forward path between the input and the output;~~

~~and compares the measuring~~ generating a comparison signal by comparing the
intermediate signal with to a previously stored measurement signal;[[,]]

~~[[-]] if a prescribed criterion is satisfied, the detector generates~~ generating a control
~~an output signal based on the comparison signal; and , which~~

~~[[-]] actuates~~ applying the control signal to a control device (KS) in the control
~~circuit, which in turn sets the output signal (I2) of the control circuit~~ forward path, the
control device limiting the output signal to a predetermined value in response to the control
signal.

9. (Currently Amended) The method of according to claim 8, characterized in that
the measuring wherein the measurement signal of the control circuit is stored in a storage
device (SP), and a second measuring signal is compared with the stored measuring signal
~~in~~ comparing is performed using a comparator (EC).

10. (Currently Amended) The method of according to claim 8 9, wherein the
control signal is generated via decision logic, the decision logic being controlled by the
comparison signal, the decision logic generating the control signal ~~characterized in that an~~
~~output signal of the comparator (EC) actuates a decider logic (E), and the latter actuates a~~
~~control device (KS), which sets an output signal of the control circuit to a value if a~~
~~prescribe~~ predetermined criterion is satisfied.

11. (Currently Amended) The method of claim 9 according to one of claims 8 to
~~10, characterized in that a signal level wherein the~~ comparator comprises at least one of
(LC) and/or a signal sign comparator and a signal level comparator (SC) of the detector
~~(D) acquire the measuring signal of the control circuit, and emit a signal to the decider~~
~~logic (E) on the output side.~~

12. (Currently Amended) The method of claim 10, further comprising:
generating an error signal based on an output of according to one of claims 8 to 11,
~~characterized in that the error signal generator (F) is actuated by a time signal generator~~
and an output of the decision logic; and

applying the error signal to the forward path, the intermediate signal being based on both the sensor signal and the error signal (TC) and/or the detector (D), and generates the error signal as a function of their output signals.

13. (New) The method of claim 1, wherein the first control signal and the second control signal comprise a same signal output of the detector.

14. (New) The controller of claim 1, wherein the sensor generates the sensor signal based on one or more input signals applied to the input of the forward path.

15. (New) The method of claim 8, wherein the sensor generates the sensor signal based on one or more input signals applied to the input of the forward path.

16. (New) A controller comprising:
a control circuit comprising:

- a forward path that includes an input and an output;
- a feedback path coupled to the output and to the input; and
- a sensor, which is in the forward path between the input and the output, the sensor generating a sensor signal based on an input signal applied to the input, wherein the forward path generates an output signal based on the sensor signal, the output signal being sent along the feedback path to the input of the forward path; and

a detector that obtains an intermediate signal from the forward path between the input and the output, the detector generating a control signal using the intermediate signal;

wherein the forward path comprises a control device that limits the output signal to a predetermined value, the detector controlling the control device using the control signal.

17. (New) The controller of claim 16, wherein the detector comprises:
a storage device that stores a measurement signal; and
a comparator that compares the intermediate signal to the measurement signal and that outputs a comparator signal.

18. (New) The controller of claim 17, wherein the detector further comprises:
decision logic that receives the comparator signal and that controls the control device in accordance with the comparator signal.

19. (New) The controller of claim 16, wherein the control device comprises a clamp circuit.

20. (New) The controller of claim 17, wherein the comparator comprises at least one of a signal level comparator and a signal sign comparator.